

PATENT CLAIMS

1. A valve, particularly a vapor valve, having a housing into which a intake connecting piece, an outlet connecting piece, and a pressure relief outlet discharge, having a spherical closing part, mounted so it is rotationally movable, which is movable by a lever, particularly a hand lever, the outlet connecting piece being connected to the pressure relief outlet in the closed position (closed setting), characterized in that an air supply inlet (10) also discharges into the housing (1) and the spherical closing part (7) may be rotated by more than 90° and is implemented so that after the closing motion around 90°, the closing part (7) may be rotated further in the closing direction with the valve closed until the outlet connecting piece (4) is connected to the air supply inlet (10) with the pressure relief outlet closed again (purge setting).
2. The valve according to Claim 1, characterized in that the further rotation into the purge setting is performed around an angle of 20° to 45°.

3. The valve according to Claim 2,  
characterized in that  
the further rotation into the purge setting is  
performed around an angle of 30°.
4. The valve according to one of Claims 1 through 3,  
characterized in that  
the lever (6) may be locked to the housing (1) in  
its closed setting.
5. The valve according to Claim 4,  
characterized in that the locking is performed in a  
spring-loaded way.
6. The valve according to one of Claims 1 through 5,  
characterized in that  
the spherical closing part (7) has double bearings  
(8, 9).
7. The valve according to one of Claims 1 through 6,  
characterized in that  
the spherical closing part (7) is sealed in relation  
to the intake connecting piece (2), the pressure  
relief outlet (5), and the air supply inlet (10)  
with a spring-loaded sealing ring (14, 15, 16) in  
each case.
8. The valve according to Claim 7,  
characterized in that  
cast webs are provided in the spherical closing part  
(7) to guide the sealing rings (15, 16) to the  
pressure relief outlet (5) and to the air supply  
inlet (10).

9. The valve according to Claim 7 or 8,  
characterized in that  
the sealing rings (14, 15, 16) are made of glass-  
fiber reinforced plastic (GFRP), particularly PTFE.
10. The valve according to one of Claims 1 through 9,  
characterized in that  
the spherical closing part (7) is supported toward  
the outlet connecting piece (4) using a thrust  
collar (17) made of bearing metal.
11. The valve according to one of Claims 1 through 10,  
characterized in that  
the spherical closing part (7) is manufactured from  
cast iron in a hard-chromium plated embodiment.
12. The valve according to one of Claims 1 through 11,  
characterized in that  
the housing (1) is made of stainless steel.